

1 1. A method comprising:
2 forming an arrayed waveguide grating having an
3 array of waveguides; and
4 arranging a plurality of heaters to provide a
5 temperature gradient across said array of waveguides.

1 2. The method of claim 1 including forming an
2 arrayed waveguide grating as a planar light wave circuit.

1 3. The method of claim 2 including forming said
2 arrayed waveguide grating on the first side of said circuit
3 and forming said heaters on the opposite side of said
4 circuit.

1 4. The method of claim 3 including forming said
2 heaters in generally the same configuration as said
3 waveguides.

1 5. The method of claim 4 including positioning said
2 heaters on the opposite side of said circuit under said
3 waveguides and directly aligned beneath said array of
4 waveguides.

1 6. The method of claim 1 including enabling said
2 heaters to be selectively actuatable.

1 7. The method of claim 6 including providing laser
2 fuses for said heaters.

1 8. The method of claim 7 including opening some of
2 said fuses to select the heaters to be operated.

1 9. The method of claim 1 including positioning said
2 heaters to provide a desired temperature gradient across
3 said array of waveguides.

1 10. An arrayed waveguide grating comprising:
2 a support structure;
3 an array of waveguides on one side of said
4 support structure; and
5 at least two heaters positioned so as to provide
6 a temperature gradient across said array of waveguides.

1 11. The grating of claim 10 wherein said heaters are
2 on one side of said structure and said array of waveguides
3 is on the opposite side of said structure.

1 12. The grating of claim 11 wherein said heaters are
2 selectively actuatable.

1 13. The grating of claim 10 wherein said structure is
2 a planar light wave circuit.

1 14. The grating of claim 10 wherein said heaters are
2 directly below said array of waveguides.

1 15. The grating of claim 10 wherein said heaters are
2 arranged in generally the same configuration as said array
3 of waveguides.

1 16. The grating of claim 15 wherein less heaters are
2 provided than waveguides.

1 17. The grating of claim 10 wherein said heaters
2 include laser actuatable fuses.

1 18. An arrayed waveguide grating comprising:
2 a support structure;
3 an array of waveguides; and
4 an array of heaters arranged in substantially the
5 same configuration as said array of waveguides, said array
6 of heaters being positioned on one side of said support
7 structure and said array of waveguides being positioned on
8 the opposite side of said support structure.

1 19. The grating of claim 18 wherein said heaters are
2 selectively actuatable.

1 20. The grating of claim 19 wherein said heaters
2 include actuatable fuses.

1 21. The grating of claim 20 wherein said fuses are
2 laser actuatable fuses.

1 22. The grating of claim 18 wherein said structure is
2 a planar light wave circuit.

1 23. The grating of claim 18 wherein said array of
2 heaters is arranged substantially directly below said array
3 of waveguides.

1 24. The grating of claim 23 wherein there are less
2 heaters than waveguides.